



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
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Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

Date: April 7, 2017

Mr. Ralph Packer
Tisbury Towing and Transportation, Inc.
P.O. Box 308
Tisbury, Massachusetts 02568

RE: NEW BEDFORD
Transmittal No.: X267403
Application No.: SE-15-029
Class: *SM-25*
FMF No.: 572640
**310 CMR 7.24(8) EMISSION CONTROL
PLAN (ECP) APPROVAL**

Dear Mr. Packer:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, Southeast Regional Office, has reviewed the above-referenced Emission Control Plan (“ECP”) application, received November 19, 2015, and supplemented on December 4, 2015, February 18, 2016 and May 27, 2016, concerning volatile organic compound (“VOC”) emissions at your marine terminal facility located at 352 Herman Melville Boulevard, New Bedford, Massachusetts.

On November 19, 2015, the MassDEP received, from Mr. Stephen Piper, P.E., on behalf of Tisbury Towing and Transportation (“the Permittee”), an ECP that was submitted to U.S. EPA as required by the Administrative Compliance Order on Consent (“AOC”) dated July 7, 2015. The ECP was to be submitted, as required by 310 CMR 7.24(8), to MassDEP for independent review and approval.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep

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LEGAL AUTHORITY

The ECP application was submitted in accordance with Section 7.24(8), Marine Volatile Organic Liquid Transfer, as contained in 310 CMR 7.00, Air Pollution Control Regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Sections 142 A-E, Sections 4 and 6.

The Permittee operates and controls a marine terminal and marine tank vessel at 352 Herman Melville Boulevard (“the Facility”) which takes part in loading events which transfer organic liquid, and is subject to the requirements at 310 CMR 7.24(8) including Reasonably Available Control Technology (RACT) Requirements at 310 CMR 7.24(8)(b). The regulations at 310 CMR 7.24(8)(f) require any person subject to 310 CMR 7.24(8) to submit an ECP which satisfies the requirements of 310 CMR 7.18(20) Emission Control Plans for Implementation of Reasonably Available Control Technology, (c) Emission Control Plan Requirements .

I. DESCRIPTION OF AFFECTED UNITS

The Permittee has been in the business of transporting petroleum products to the Cape Cod Islands for approximately fifty years. The petroleum products include gasoline, ethanol, transportation diesel, off road diesel, and home heating oil. The operation involves loading a small (approximately 130,000 gallon) barge, using a gravity-feed system from multiple, 12,000 gallon, over-the-road petroleum tank trucks. The trucks carrying organic liquid products (e.g. gasoline) are subject to the Motor Vehicle Fuel Tank Trucks regulations at 310 CMR 7.24(4).

The New Bedford barge loading operation via tank truck has been necessitated because there are currently no petroleum terminals in New England for marine loading of gasoline. Currently, the only other option for transporting petroleum products to the Cape Cod islands is by sending tank trucks via the Woods Hole, Martha’s Vineyard and Nantucket Steamship Authority ferries. This option can be limited during the summer months due to additional commercial and passenger traffic.

The Permittee has committed to VOC control by establishing a limit on the throughput of organic liquid and the continued use of a vapor balance system (i.e. delivery tank vapor collection equipment) to capture organic vapors from loading operations and returning those vapors to the offloading tank truck. The tank truck, in accordance with 310 CMR 7.24(4)(j), will then deliver the captured organic material vapors to a properly operating vapor recovery system pursuant to 310 CMR 7.24(2)¹. The vapor return hoses and the liquid delivery hoses for the barge loading operation will be maintained at the facility and will be hydrostatically tested annually to detect tears or holes. The vapor return hoses and associated fittings shall be included in the annual Method 21 leak test.

¹ With the exception that, in lieu of 310 CMR 7.24(2)(a)3., the amount of organic material released to the ambient air shall be not greater than 10 milligrams per liter of liquid loaded or unloaded over a six hour period, as determined by the reference method and test procedures found in 40 CFR 60.503(c) and 60.503(d).

The applicable emission units are summarized in Table 1:

Table 1. Equipment Description

Emission Unit (EU#)	Description of Emission Unit	Maximum Capacity of Equipment	VOC Emission RACT Standard and/or Regulation
EU 1	Marine Volatile Organic Liquid Transfer equipment to include Tank Barge, Tank Truck(s), Fill line(s), Vapor line(s), vapor control system.	Tank Barge capacity: 130,000 gallons	310 CMR 7.24(8)

Table 1 Key:
CMR = Code of Massachusetts Regulations
EU# = Emission Unit Number

II. EMISSION LIMITATIONS

VOC Emission Limitations:

Emission Units referenced in Table 1 shall comply with the VOC emission limitations contained in 310 CMR 7.24(8)(c)1. b.

310 CMR 7.24(8)(c)1. b.: The Permittee shall not cause, suffer, allow, or permit a loading event while docked at a marine terminal unless marine tank vessel emissions of volatile organic compounds are processed by equipment satisfying 310 CMR 7.24(8)(d), and reduced by at least 95% by weight as compared to uncontrolled conditions when using a recovery device, or by at least 98% by weight as compared to uncontrolled conditions when using a combustion device.

Table 2. Emission Limits

Emission Unit (EU#)	Maximum Monthly Potential Emissions (uncontrolled)	Maximum Consecutive 12-month period Potential Emissions (uncontrolled)
EU1	7.8 tons	14.2 tons
Emission Unit (EU#)	Maximum Monthly Potential Emissions (controlled)	Maximum Consecutive 12-month period Potential Emissions (controlled)
EU1	0.39 tons VOC	0.71 tons VOC

Table 2 Note: Potential emissions are based on Operational Restrictions as defined in Table 3, an AP-42, Table 5.2-2 uncontrolled VOC emission factor of 3.9 lb/1000 gallons, and 95 percent overall control efficiency as defined in the ECP VOC RACT Strategy vapor control approach.

Table 2 Key:
EU# = Emission Unit Number
lb = pound(s)
VOC = Volatile Organic Compound(s)

III. RACT STRATEGY

A. Emissions Capture and Control Equipment Requirements. Any emissions capture and control equipment used to comply with 310 CMR 7.24(8)(c) shall be designed and operated to collect and control volatile organic compound emissions from the loading of organic liquids into marine tank vessels.

B. Equipment Performance Standards.

1. No person subject to 310 CMR 7.24(8) shall cause, suffer, allow, or permit a loading event unless the marine tank vessel is vapor-tight or the tank vessel is loaded at less than atmospheric pressure.
2. Marine tank vessels shall be demonstrated to be vapor-tight in accordance with 310 CMR 7.24(8)(e)2., and the testing requirements of this approval.
3. The Permittee shall not allow or accept transfer of organic liquid into the marine tank vessel unless the delivery tank truck has a certificate on file with the Permittee indicating that the truck has demonstrated compliance with the regulations at 310 CMR 7.24(4) Motor Vehicle Tank Trucks.
4. The Permittee shall ensure that each vapor return hose assembly downstream of the marine tank vessel vapor connection is properly maintained and vapor-tight.
5. The Permittee shall ensure all delivery tank trucks deliver the captured organic material vapors to a properly operating vapor control system pursuant to 310 CMR 7.24(2)(a)1. and 2., and/or 40 CFR Part 63, Subpart R. Furthermore, the tank trucks involved in the loading of organic liquid at the facility shall be loaded at a bulk gasoline terminal that meets an emission standard of ≤ 10 milligrams of total organic compounds per liter of gasoline loaded or unloaded over a six hour period, as determined by the reference method and test procedures found in 40 CFR 60.503(c) and 60.503(d).

C. RACT Strategy. As proposed in application No. SE-15-029, the Permittee shall incorporate the following emission control elements:

1. The Permittee shall, for the tank barge used, conduct an annual vapor-tightness pressure test in accordance with the requirements at 40 CFR Part 63, Subpart Y, §63.565(c)(1). The test shall be conducted one time each year between September 1st and October 31st.
2. The Permittee shall have a third-party Compliance Testing Company conduct an annual Method 21 vapor-tightness leak test, as described at 40 CFR Part 63, Subpart Y, §63.565(c)(2), during a organic liquid barge loading event to verify no leaks (defined as 500 parts per million by volume [ppmv] or greater, as methane) from the potential air emission leak points of the barge. In addition to the barge vapor-tightness leak test, the Method 21 leak test shall include the facility vapor collection equipment (i.e. "Delivery tank vapor collection equipment" as defined in Method 27 of 40 CFR Part 60, Appendix A and specifically the facility's vapor return hoses) in order to ensure the integrity of the entire vapor collection system. The test shall be conducted each year between May 1st and June 30th.

3. Organic liquid vapors displaced during loading of the barge shall be ducted back to the tank truck via a vapor balance system. The vapor-laden tank trucks shall comply with the requirements at 310 CMR 7.24(4)(j). All tank trucks making deliveries of organic liquid to the facility shall provide certification of compliance with the regulations at 310 CMR 7.24(4).
4. The Permittee shall limit emissions of VOC by restricting operations as defined in Table 3 below:

Table 3. Operational Restrictions

Emission Unit (EU#)	Monthly organic liquid throughput	Consecutive 12-month period organic liquid throughput
EU1	≤ 4,000,000 gallons	≤ 7,300,000 gallons

Table 3 Key:
 EU# = Emission Unit Number
 ≤ = less than or equal to

IV. MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

1. The Permittee shall prepare and maintain records regarding each loading event sufficient to demonstrate compliance with 310 CMR 7.24(8)(c) through (e). Records demonstrating compliance shall be kept on site² for five years and shall be made available to representatives of the Department or EPA. Such records shall include, but are not limited to:
 - a) The name and location of the marine terminal at which the loading event occurred.
 - b) The company responsible for the operation of the marine terminal.
 - c) The date(s) and times at which the marine tank vessel arrived and departed from the marine terminal.
 - d) The name, registry, and owner of the marine tank vessel.
 - e) The prior cargo carried by the marine tank vessel.
 - f) The type and amount of organic liquid loaded into the marine tank vessel.
 - g) The tank truck identification, truck owner and truck operator for each loading event.
 - h) The condition of the marine tank vessel tanks prior to being loaded (*e.g.*, cleaned, gas freed, *etc.*).
 - i) Any testing performed during loading.
 - j) Any leaks detected and the corrective action taken, to include verification of repair.
2. The Permittee shall secure and maintain a record of the name(s) and location(s) of any bulk terminal(s) at which any tank truck that performs delivery of organic liquid offloads vapor recovered during each organic liquid loading event to ensure the bulk terminal complies with the requirements at Section III.B.5.
3. The Permittee shall maintain, for each marine tank vessel loaded at the facility and tested in accordance with Section III.C.1., above, a record of the annual vapor-tightness pressure test documentation pursuant to 40 CFR Part 63, Subpart Y, as well as certifications from the U.S. Coast Guard which include verification of pressure relief vent operation.

² As allowed in Special Condition No. 1

4. The Permittee shall maintain records of the annual third party testing required at Section III.C.2., above, conducted in accordance with 40 CFR Part 60, Appendix A, Method 21.
5. The Permittee shall maintain a record of the annual test certification demonstrating compliance with 310 CMR 7.24(4), for each tank truck that delivers to the tank barge (i.e. marine tank vessel) and the documentation required at 40 CFR Part 63, Subpart R, §63.428(b)(3).
6. The Permittee shall ensure that each hose used at the facility is individually identifiable and maintain records demonstrating that the fill hoses and vapor return hoses used during organic material transfer operations have been tested annually to ensure proper operation.
7. The Permittee shall notify the Department in writing of the date of any test to demonstrate compliance with this approval at least 30 days in advance of that date. Testing results shall be submitted to the Department within 30 days of completion of the test. Any testing results shall be maintained by the Permittee for a period of five years.

V. TESTING REQUIREMENTS

1. The Permittee shall conduct an annual vapor-tightness pressure test and an annual Method 21 vapor-tightness test to demonstrate compliance with 310 CMR 7.24(8) as described above in Section III, C.
2. The Permittee shall submit a pre-test protocol for MassDEP approval no less than 30 days prior to the required annual vapor-tightness pressure test and the annual Method 21 vapor-tightness test.
3. All testing shall be done in accordance with MassDEP and U.S. EPA approved test methods.

VI. SPECIAL CONDITIONS

1. All documentation required by this Approval shall be available for inspection by MassDEP or U.S. EPA representatives upon request. The physical location of these records is not required to be at the subject facility as long as the documentation can be made available within a reasonable amount of time not to exceed 24 hours.
2. The Permittee shall maintain organic liquid fill hoses and vapor return hoses used for the facility organic liquid transfer operation on site. The Permittee shall ensure that the hoses and associated fittings are leak-tight, maintained in good operating condition, and are available for inspection at all times.

3. The Permittee shall respond to any leak, equal to or greater than 500ppmv (as defined above in Section III. RACT Strategy, C.2.) detected by the annual pressure test or Method 21 during a loading event by immediately tagging the leaking component and isolating the leak if possible. The leak must be repaired and re-tested by Method 21 prior to the next loading event.
4. The Permittee shall ensure that, upon determining that a marine organic liquid transfer operation component is damaged, incorrectly installed, non-functioning or broken, the component is immediately repaired or replaced.
5. The Permittee shall ensure that there shall be no operations involving ballasting, or cleaning of cargo tanks performed at this facility.
6. The Permittee shall ensure that the vapor recovery system is properly in place and vapor-tight prior to the initiation of any loading operations.
7. MassDEP reserves the right to determine potential air emission leaks with an optical gas imaging (OGI) camera (e.g. FLIR GF320 or equivalent). The MassDEP intends to use this technology to better identify potential leaks during annual Method 21 testing. The detection of a potential leak by an OGI camera will be evaluated to determine if corrective action is necessary.
8. The Permittee shall operate the facility, including the storage and disposal of volatile organic compounds, in a manner which will minimize evaporation to the atmosphere. Proper storage shall be in a container with a tight fitting cover. Any spills shall be cleaned up as expeditiously as practicable. Proper disposal shall include incineration in an incinerator approved by the MassDEP, transfer to another person licensed by the MassDEP to handle VOC, or any other equivalent method approved by the MassDEP.

VII. GENERAL CONDITIONS

1. The Permittee shall maintain continuous compliance with the terms of this ECP Approval at all times. All applicable emission units shall be operated in strict accordance with the plans and specifications submitted as part of the ECP approved herein. Should there be any differences between the application materials and this approval letter, this approval letter shall govern. All notification and reporting requirements contained herein shall be directed to the Department of Environmental Protection, Bureau of Air and Waste, Southeast Regional Office, Attention: Chief, Permit Section.
2. This ECP Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.

Failure to comply with any of the above-stated provisions will constitute a violation of the regulations, and can result in the revocation of the Marine Volatile Organic Liquid Transfer ECP Approval to operate the described facility. Any subsequent changes to the facility that are contrary to the facility as described in this letter or in 310 CMR 7.24(8) VOC ECP application No. SE-15-029 must be approved in writing by MassDEP prior to the change.

This Approval is an action of MassDEP. You have a limited right of appeal. Please refer to the attached information, Appeal of Approval.

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy and Environmental Affairs for air quality control purposes was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and Regulation 310 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions" which allow the Secretary to require the filing of an ENF and/or Environmental Impact Report (EIR) at a later time.

Enclosed is a stamped, approved copy of the submitted Emission Control Plan application. Should you have any questions relative to this Approval, please contact Peter Russell at the Southeast Regional Office at (508) 946-2821.

Sincerely,

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Thomas Cushing, Chief
Permit Section
Bureau of Air and Waste

C/PR

Attachment: Appeal of Approval
Enclosure: Copy of ECP Application

ecc: New Bedford Fire Department
New Bedford Health Department
Stephen Piper, P.E., M.J. Bradley & Associates
Christine Sansevero, USEPA, Region 1
Marc Wolman, MassDEP/BAW, Boston, MA
Yi Tian, MassDEP/BAW, Boston, MA
Maria Pinaud, MassDEP/BAW, Lakeville, MA
Peter Russell, MassDEP/BAW, Lakeville, MA

APPEAL OF APPROVAL

This approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the Approval is not consistent with applicable laws and regulation.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.